

THE  
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AMERICAN  
BEE JOURNAL.

EDITED BY SAMUEL WAGNER.

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“———To Us, both field and grove,  
Garden and orchard, lawn and flowery mead,  
The blue-vein'd violet, rich columbine,  
The wanton cowslip, daisies in their prime,  
With all the choicest blossoms of the lea,  
Are free allowed and given.”

PARLIAMENT OF BEES, JOHN DAY, 1607

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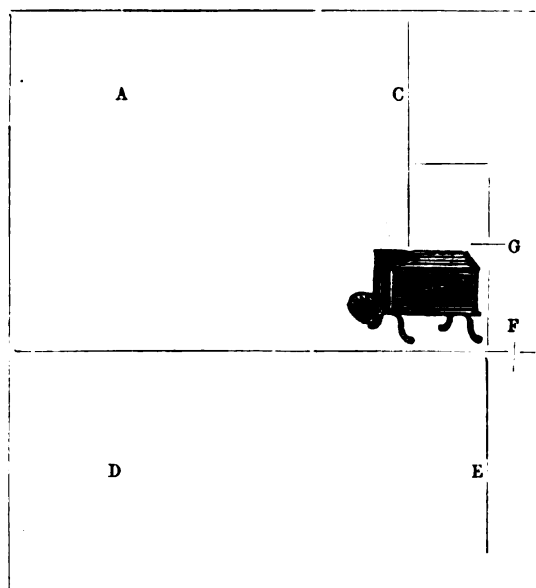
1871.

modified much by the number of colonies wintered in one room. Through the months of December, January, and February, let the temperature be kept as near 45° as possible. After this let the temperature run up to 50°, and keep it this high to promote early breeding. When set out stop all the crevices but the entrance and the bees will be in the best possible condition for early swarming and an abundant harvest of surplus honey.

E. L. BRIGGS.

*Mount Pleasant, Henry Co., Iowa.*

Accompanying the above was an illustrative diagram, showing the arrangement for ventilation, somewhat as below.



- A The kitchen.
- D The cellar.
- B The stove.
- C The stove-pipe.
- E The ventilating tube.
- F Air passage in kitchen floor.
- G Damper.

It will be seen by this diagram that the tin tube is entirely out of the way; and that the draft can be shut off at any time by a damper in the tube. The air being let in at F, is gradually diffused, and sinks to the floor of the cellar and is drawn through the tube, until the whole is changed.

A cellar ventilated in this way will remain as pure and free from any bad smell as any room in the house.

In districts where buckwheat is extensively cultivated, bees will sometimes swarm when it comes into blossom; and the hives therefore need watching or examining at that period.

Buckwheat swarms have been known to issue some years as late as the middle of September.

[For the American Bee Journal.]

### How bees secure pollen to their thighs!

A correspondent in a recent number of the BEE JOURNAL gives the manner in which bees remove pollen from their thighs and deposit it in their cells. I never knew until this season, how they collected it and secured it to their thighs, and as others may not have observed the process, I will record it.

In feeding some flour this spring, my attention was attracted by the large number of bees hovering on wings, just over it and a few inches above it, almost stationary, now and then alighting for an instant; while some would merely touch the flour, and rise again, without stopping. Upon close examination I saw that their feet were going in as rapid motion as their wings, and that they were engaged in securing the flour to their thighs. They take up the flour or pollen with their fore feet, rise on wing, and with a rapid motion of all their legs, convey it and secure it to the receptacle on their hind legs, while flying. In gathering pollen from flowers, they collect all they can with their mouth and fore feet, and while passing to another flower and hovering over it for an instant, convey it to their baskets and secure it there. The peculiar noise or humming made while securing the pollen, we do not hear when gathering honey alone.

Mathematicians tell us of the great wisdom and ingenuity manifested in the construction of the cells of the honey combs, so as to use the greatest economy in space with the greatest possible strength, and now we see in this wonderful insect the wise provision of the great Creator for the economy of time. No time is lost by having to stop within the flower to secure the golden-colored treasure, but it is secured on wing while passing in search of more.

T. SMITH.

[For the American Bee Journal.]

### The Thomas Hive.

MR. EDITOR:—We should like to have *our say* about which we think the best hive—its advantages and disadvantages. Taking everything into consideration, we regard the Thomas hive as the best of any we have seen.

The advantages are:—

1st. It is of the best shape to secure the greatest amount of heat for wintering bees, and for rearing brood in the spring.

2d. The combs can be removed, examined, and placed back, inside of five minutes; and with the least jarring or disturbing of any hive we ever opened; there being no empty space between the ends of the frames for the bees to fill with wax.

3d. It is so constructed that in moving the hive or combs, the frames are always in their proper place.

4th. It may be opened and closed without crushing a bee.

5th. It can be made with side doors a foot or more square, and back door ten inches square.

6th. In one minute you can have a circulation of air passing through every part of the hive; or in the same time you can allow as little as you wish.

7th. It has a swinging bottom board, which enables the apiarian to clean the hive of dead bees and of filth, without removing hive or combs.

8th. There is a passage through the bottom board covered with wire cloth, through which the bees receive air when shut in by the apiarian or snow.

9th. The frames can be handled with ease by the ends, which project  $1\frac{1}{4}$  inches from the side of the comb, instead of taking hold of the frame among the bees.

10th. It contains the strongest frame we have seen.

11th. It cannot be surpassed for storing honey.

12th. It has comb frame stops, which hold the frames in their places and prevent the bees filling between with wax.

13th. It has two revolving bands, which gives the apiarian access to the ends of the frames, and when turned down form an alighting board for the bees and a short passage to the surplus honey boxes.

14th. It has a cover which carries the water to the sides of the hive.

15th. It does not gather dampness on the bottom board, as it touches the ground only on the ends of the side board.

16th. The bottom board slants to the front, the hive being vertical, enabling the carrying out of dead bees, aiding them to repel robbers, carry off moisture, and prevent rain from entering the hive.

17th. There are no openings in winter through which mice may get in.

18th. One, two or four boxes may be used.

19th. It presents a beautiful appearance in an apiary. Placed as ours are, in rows north and south, and east and west, they look like a village.

The disadvantages are:—

1st. It costs more than many others. First cost here \$3.50.

2d. We have to set the boxes on the frames, instead of using Langstroth's honey board and air chamber.

3d. The improvements are worse than useless to one who will not properly use them.

PALMER BROS.

New Boston, Ill.

[For the American Bee Journal.]

#### Letter from Tennessee.

A few years after Tennessee was admitted as a State in the Union, emigration set in in earnest to the western country—a land akin to the one the Israelites were seeking—"flowing with milk and honey." The cane afforded pasturage for cattle during the whole year, and the forests abounding in bee-trees. Most of the settlers in this (Rutherford county, were from North Carolina and Virginia. At particular seasons of the year baits were set up and the bee-trees marked—an expert finding several bee-trees in a day. From

twenty-five to fifty pounds of nice honey, was generally taken from each, and the bees frequently left to take care of themselves. The more thrifty and economical hunters would secure the swarms, and carry them home in *gums* previously prepared.

Hollow oak, elm, and cedar trees were felled, sawed in pieces from two to two and a half feet long, and the inside smoothed with what the old people call a round shave. One inch holes were bored about midway the gum, and a round stick passed through. The top was covered with bark of the red or black oak, the bottom left open, and three or four inverted v's (Λ Λ Λ) cut in its edge, and it was then placed on a flat stone in the back yard. Robbing or taking honey every year in the spring, was attended to by removing the top and cutting out the comb down to the X sticks. The broken combs in the gum were then sprinkled with wheat, bran, and the top replaced.

Bee-moths were then (from 1810 to 1825) unknown, and for years after. I have been unable to ascertain the exact year the moth miller made its appearance in this county. But when it came the bees were killed by thousands, offering only feeble resistance to the inroads of the destroyer.

As early as the year 1830, a man by the name of Jenkins, living in this county, discovered that the queen bee accompanying a swarm last spring, generally led the first swarm the spring following; but he never observed her the third season. He ascertained this by notching the queen's wing so much that it impeded her flight having caught her while passing into the hive during swarming time.

About the year 1840, the more wealthy bee-keepers were gulled into purchasing bureau-wheatfan-like looking articles called bee-palaces and enough was paid for them to keep a small family in honey for ten years. It is not necessary to tell you they were short lived—the concerns lasting longer than the bees that were in them. People were so "burnt" with them, and such a quantity of them were scattered through this country that that generation had to nearly pass away, before improved hives of any description or pattern whatever could be introduced.

Within a few years past several patent hives have made their appearance in our midst; and some interest is being manifest in an improvement on the old gum and procuring better bees.

The movable frame (Langstroth) hives have been much used here for three seasons past, and with intelligent bee-keepers give satisfaction; although we have never experienced with that hive those marvellous returns in honey claimed by some persons interested in other hives.

We winter our bees in the open air. No foul brood has made its appearance in our county. Wishing your journal success and more patronage, I am yours, &c.

WM. P. HENDERSON.

Murfreesboro', Tenn., June 27, 1870.

Early in October all the hives in an apiary should be carefully examined, to see if they are in a suitable condition for wintering.

hive, *on the frames*, and do not use the honey-board between the boxes and hive in any case. This third story is only used with very strong stocks.

Once more, I will say that this hive suits me, and can be used for every purpose, in forming nuclei. You can raise four queens in it, as Mr. Truesdell says, and by inserting three division boards you can make it into four small hives. The entrance on the four sides of the hive are all in the bottom board. It can be accommodated to any size of swarm, simply by using the division boards, or not, as the case requires. In short, read what Mr. Truesdell says about the hive, and also what I have previously said about it; and then read what I say in the "Annals of Bee-culture for 1870" (when it comes out) about the best method of having honey stored in combs for market—decidedly the best, in my opinion; better than any glass boxes I ever saw. In such a hive you have one adapted either to a poor honey district, or to a good one. It will accommodate the largest, as well as the smallest swarm you ever saw. It is cheap and simple. Understand, I am not cracking up this hive to make money out of it, for it is not patented, and I have no time to make any to sell.

Orchard, Iowa.

E. GALLUP.

[For the American Bee Journal.]

### The Gallup Hive.

I wonder sometimes how many bee-keepers have tried the Gallup Hive, there being so many other hives that are so highly recommended. I have made and used, now for two seasons, more than a dozen of the Gallup form of hive; and thus far I think it is good for all that Gallup claims for it. Simple in its construction, easily and cheaply made, and for one, I cannot conceive how any hive could be better adapted or more convenient to form nuclei with full sized combs, to raise queens, to equalize bees and stores, build up stocks, exchange combs promiscuously from hive to hive, &c., &c. No trouble about the frames hanging true, and I think I can handle a set of frames in the Gallup form of hive in as short a time as I can in the Langstroth standard; and I am using both. If the several parts of the Gallup hive are correctly made and put in place, it is almost air-tight; and yet any amount of air, whether much or little, can be given and regulated, even to the extent of suspending the hive in mid-air, with top and bottom off, if it were necessary. Its surplus honey arrangement can be made to suit location or fancy. I do not suppose that Novice or Grimm, or some others, would do any better by using the Gallup hive; but my circumstances are very different from theirs. And as it is of the utmost importance to me to use only one kind of hive, I intend to use the Gallup form exclusively as soon as I can, without material loss.

HENRY CRIST.

Lake P. O., O., Sept. 7, 1870.

Those that boast most, fail most, for deeds are tongue-tied.

[For the American Bee Journal.]

### Palmer Brothers and the Thomas Hive.

It is due to myself and to Palmer Brothers to say that their article, so greatly in favor of my hive, was written without my knowledge and entirely upon their own responsibility.

While I feel grateful to them for their high opinion of my hive, and the impartial manner in which they have spoken of it, I may be allowed to correct two or three items in the description thereof. They have purchased the territory for these hives before the alterations of which I am about to speak were made.

"*Advantage 8th*" (see BEE JOURNAL, Vol. VI., No. 2, Aug. 1870.) "There is a passage through the bottom board, covered with wire cloth, through which the bees receive air," &c. After five years' experience and experimenting with the hive and the best method of ventilating, I now make the bottom board without any hole through it, preferring instead to put a hole through the rear end board of the hive, about one inch from the bottom, and covered with wire cloth. The hole is an inch and a half in diameter, and allows a circulation of air from front to rear. I consider this the best method of ventilating a hive, and in most, if not all cases, quite sufficient, and especially so with an entrance such as I use in my hive, and with which Palmer Brothers were not acquainted for reasons already stated. I will just say the entrance is so constructed, with a double zinc gauge, that it can be enlarged in a moment of time to half an inch deep and the full width of the hive, and contracted in the same time to half an inch square.

"*Advantage 16th*. The bottom slants to the front." It may be made inclined or level, as desired by the builder.

"*Advantage 18th*. One, two, or four boxes may be used." Six square boxes, suitable for market, may be used.

"*Disadvantage 3d*. The improvements are worse than useless, to one who will not properly use them." This is true of all frame hives. If a bee-keeper intends to let his bees die, with no attention on his part, he certainly will save the expense of improvements by setting them in a hollow log.

To those parties who may purchase territory I will send a sample hive, paying all charges to the line. See advertisement, and make an offer.

J. H. THOMAS.

Brooklin, Ontario.

[For the American Bee Journal.]

### Bee Cholera.

MR. EDITOR:—I see that many persons have lost their bees by what is called Bee Cholera. I have had some bees die with the same disease. I then took a colony after one half the bees were dead, ventilated the hive well, and carried it into the stove room, and kept it there the space of eight days. It is now a strong colony. I suppose the heat of the room evaporated some of the water in the honey.

B. R. HOPKINS.

Tyrone, Pa.

hatch. Thus, by the time the queen hatches, she will have nearly a hundred workers in the cage with her, and will not become uneasy or excited to get out of the cage. She will thus remain quiet on the comb, until she is old enough to leave it and go in search of the drones. Near this hour the drones can be introduced by the little tin door at the bottom of the ante-chamber, that door closed again and the tin slide carefully removed. The drones and queen are thus let together, without excitement or disturbance. This cage may be made six inches long, by four inches deep, and one and a half inches wide. Then, by placing the comb in the middle, at the back end of the parlor, with the capped cells facing the wire sides, the bees can emerge from the cells and pass all around the comb.

From various experiments I am led to conclude that the above arrangement will approach nearer to the thing wanted, than any of the plans yet made public. I am, also, further convinced that much attention must be paid to the age of the young queen, and to the state of the weather, in order to secure fertilization in confinement. In fact, we must approach as near as possible to the natural state of the circumstances that govern the mating of queens and drones. I may say, in addition, that it is evident some queens will mate earlier than others, if not hindered by bad weather. The meeting of the queens and drones must not be attended by any circumstances calculated to cause either of them to become alarmed and seek release from confinement; for if thus alarmed or excited, they will worry themselves to death in a few hours, or forget all their natural instinct for mating or fertilization. On the plan above described the queen feels at home where she was hatched, with her hundred associates around her, and under careful management, not liable to become excited. The drones alone are liable to be in any degree alarmed under this method; and I find this is quickly removed by letting them into the presence of a few workers, as in the above case. If done quietly, little excitement need occur.

JEWELL DAVIS.

Charlestown, Ill., Sept. 5, 1870.

[For the American Bee Journal.]

### Bee-keeping Advancing.

MR. EDITOR:—We are doing a fine thing in the bee business here this season. We (my brother and I) are creating quite an interest in bee-culture around here, by the use of our Hruschka. The way we sling the honey out is a caution. We have obtained six hundred and twenty-five (625) pounds of extracted honey, and six hundred and fifty (650) pounds of box honey from eight colonies of bees, and have increased them to twenty-two; and all the hives are full of honey now—the result of scientific bee-culture.

Old foggy bee-keepers begin to open their eyes, and think that bee-keeping is not all mere luck. The light begins to shine, and bee-keeping is advancing.

The Italian bees are more and more approved,

and taking the place of the black bees; and I am in hopes we shall in a short time have none but Italians around here.

We have tried friend Alley's plan of introducing queens with tobacco smoke, and failed several times, simply because we did not smoke the bees enough. We introduce now successfully with tobacco by smoking them till they are nearly stupefied, and then they will receive the queen without fail. We find the Italians will receive a queen quicker or more readily than the black bees, without any smoking. The Italians are better every way than the blacks. They are as much in advance of the latter as the mowing machine is in advance of the scythe.

D. L. COGGSHALL, JR.

West Groton, N. Y.

[For the American Bee Journal.]

### A Visit to Palmer Bros' Apiary, and What I Saw There.

I lately went to visit the apiary of Palmer Bros., at New Boston, in Mercer county. When I came near the house I saw a lot of beehives nicely arranged in rows, north and south, and east and west. They were some eighty in number, I think. The inmates of the house were two very pleasant, clever young men, keeping bachelor's hall. My team was put up and cared for, and we had an interesting talk about bees, beehives, and raising queens.

After dinner the honey-slinger was brought out. It is one of their own getting up, and does well the work it is intended for. A hive was opened, some frames removed, and about twenty pounds of very nice honey slung out in ten minutes.

On returning home and having a good night's sleep, I went into my own apiary next morning with new spirits.

Eliza, Ill., Aug. 8, 1870.

J. BOGART.

[For the American Bee Journal.]

MR. EDITOR:—You may remember that in the Bee Journal for September, 1869, Mr. George P. Kellogg, of Waukegan, Ill., gave out a very broad challenge to bee-keepers. In the October number, I accepted his challenge; but since that time we have not heard from Mr. Kellogg, through the Journal. Now it is due that he should withdraw his proposition, or meet us at the State Fair, in Michigan, and take an oyster supper, and pay the printer; or cry "*peccavi*!" and I will pay the printer. What say you, brother Kellogg?

We have had an excellent honey season in northern Wisconsin, so far, this summer; with a prospect of its continuing until frost comes. Success to the enterprise, and the Journal.

A. A. HART.

Appleton, Wis., Aug. 6, 1870.

In bee-culture the chief factor is intelligence, and not capital. The former must produce the latter.

[For the American Bee Journal.]

**White Clover, Strong Stocks, Experiments, etc.**

During an experience of twenty years in keeping bees in my location, I have seldom got surplus honey from any other source than white clover. Of basswood there is very little here. In some seasons the clover failed to bloom; in others it bloomed freely from the latter part of May or the first of June until late in the fall, but yielded very little honey. In most seasons, however, it yielded honey abundantly for eighteen or twenty days, never longer. In such seasons it usually bloomed some time before and after the period of abundant yield, but was very little visited by the bees. I have tried various methods to keep my stocks strong to work on the clover. Four years ago, I tried the following experiment, embracing eight strong stocks of black bees. Four of these I permitted to swarm, and as soon as a stock had swarmed, I exchanged stands with the next strongest stock, and removed all the queen cells but one, on the sixth day; and continued to do so till four stocks had swarmed, and the eight thus operated upon. Result: neither of the four stocks from which the bees were drawn, attempt to swarm, and each stored about forty pounds of surplus honey. Two of the stocks, thus reinforced after they had swarmed, continued to work as if nothing had happened; did not swarm again; and also stored about forty pounds of surplus honey, each—the same as the other four. The remaining two stocks were bent on swarming again. Both together did not store over ten pounds of surplus honey, and did very little inside. Both swarmed soon after their queens began to lay—the one on the 17th and the other on the 18th day after they had swarmed the first time. Neither of them had started any queen cells, but each raised a good queen afterwards. Since I have been using the Gallup hive, I have done very differently. But, more anon.

HENRY CRIST.

*Lake, Stark Co., Ohio, April 8, 1871.*

[For the American Bee Journal.]

**Frames to suit Honey Extractors.**

MR. EDITOR:—As the size and shape of frames for honey-extractors is a subject somewhat new, we will give you an opinion based upon our experience. We prefer the bottom or brood frames deep, from twelve to fourteen inches; and the top frames for the honey extractor shallow, about seven inches;—for the following reasons: we then seldom have any brood to handle, and shallow frames of honey are not so liable to be broken, while being handled in the machine.

These upper frames we place in a box which rests upon the hive the same as the cover for boxes. (We speak of the "Thomas hive," and this has a flat cover which fits closely on the box, leaving a chamber one-fourth of an inch between the frames and cover.) If we wish to examine the brood department, we take off the box,

cover, and frames at once. If we only wish the honey frames, we remove the cover, take out the frames, and brush the bees in front of the hive.

Our hives are near each other, and the ground is kept clean by an occasional hoeing. We would be pleased to learn more from our friend, J. Bogart, who has about 160 colonies in good condition and well managed, as we found by the time he had shown us his apiary. He is a practical "bee-man." If he will favor us with another call, he will find "Bachelor's Hall" renovated, and occupied by some of the fairer sex.

We prefer to put our slung honey in kegs or barrels for home use or shipping, and let the party shipped to put it in one or two quart glass jars, or sell by the pound, as will suit purchasers. The scales can be placed below the faucet, which can be closed when the required amount is drawn; the latter we find very convenient.

We are asked so frequently to give a description of our honey slinger, that we have concluded to give it in the BEE JOURNAL, once for all. We first made one, using a *tin can*, as recommended in the Journal, Vol. V., pages 87 and 169. We found the can liable to be indented and become springy, and requiring, if the combs were not of even weight, one man to hold the machine still. We tried again, and got an oak tub made 27 inches high; bottom diameter 25 inches, top diameter 22 inches; four hoops, the bottom one being set low enough to allow a faucet placed above it, so as to draw off all the honey. Two opposite staves should be allowed one inch or more above the top of the tub, which will hold the cover in place. We made the frame and shaft similar to those described in Vol. V., No. 4, by T. C. Hill. The cover is made of two pieces, on one of which is the gearing (we use fanning mill gearing), while the other is raised to put in the combs. We occupy only space enough to show the difference between ours and others previously mentioned.

We would be pleased to learn the results of wintering bees in a cellar, with stove-pipe ventilation.

PALMER BROS.

*New Boston, Ill.*

[For the American Bee Journal.]

**Wire Gause, and Introducing Queens.**

On page 228 of the April number of the Journal, in an article headed "Wintering Bees," D. P. Lane hits Gallup a dab about the wire cloth. From his own showing, providing he has not given his bees that purifying flight in February, where would they have been now? I have a few questions to ask Mr. Lane. I set my bees in the cellar the first week in December, and took them out the first week in April; and in all that time they were scarcely looked at. In fact, I was away from home, attending conventions, eight weeks during that time. I used no wire cloth, and do not think it necessary. When I once place my bees in the cellar, they are not taken out till spring is open. I think this "taking out" and "returning" unnecessary; and his bees cannot possibly be in better condition than mine.